IN THE CLAIMS:

- 1. (Currently Amended)
 A multiple access communication system comprising at least one primary station (2) and a plurality of secondary stations (32, 34, 36), the primary station (2) and the secondary stations (32, 34, 36) being interconnected via a network, the secondary stations (32, 34, 36) being arranged for transmitting return signals in a return signal frequency band to the primary station (2), the secondary stations (32, 34, 36) being further arranged for transmitting the return signals in only a part of the return signal frequency band containing relatively little noise, characterized in that wherein the network comprises means (40) for mapping a first set of the return signals of the plurality of secondary stations onto a first portion of the return signal frequency band and mapping a second set of return signals of the plurality of secondary stations onto a second portion of the return signal frequency band.
- 2. (Currently Amended) A multiple access communication system according to Claim 1, characterized in that wherein the means (40) for mapping the return signals are located in a part of the network where relatively little noise occurs.
- 3. (Currently Amended) A multiple access communication system according to Claim 1, characterized in that wherein the part of the return signal frequency band is an upper part of the return channel band, the means (40) for mapping the return signals comprising a down converter (48, 50) for down converting the frequency of at least one of the return signals.
- 4. (Currently Amended) A multiple access communication system according to Claim 3, characterized in that wherein the down converter (48, 50) comprises a block down converter.
- 5. (Currently Amended) A multiple access communication system according to Claim 1, characterized in that wherein the network comprises a coaxial cable network.

6. (Currently Amended) A multiple access communication system according to Claim 1, characterized in that wherein the network comprises a hybrid fiber/coax network.